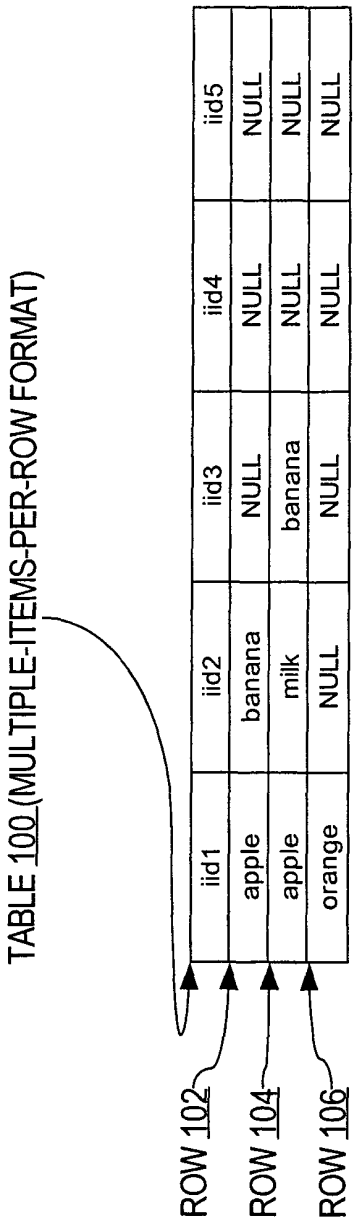
TABLE 100 (MULTIPLE-ITEMS-PER-ROW FORMAT)
iid1
iid2
iid3
iid4
iid5
apple
banana
NULL
NULL
NULL
apple
milk
banana
NULL
NULL
orange
NULL
NULL
NULL
NULL
ROW 102
ROW 104
ROW 106

FIG. 1

TABLE 200 (SINGLE-ITEM-PER-ROW FORMAT)

tid	iid
1	apple
1	banana
2	apple
2	milk
2	banana
3	orange

FIG. 2

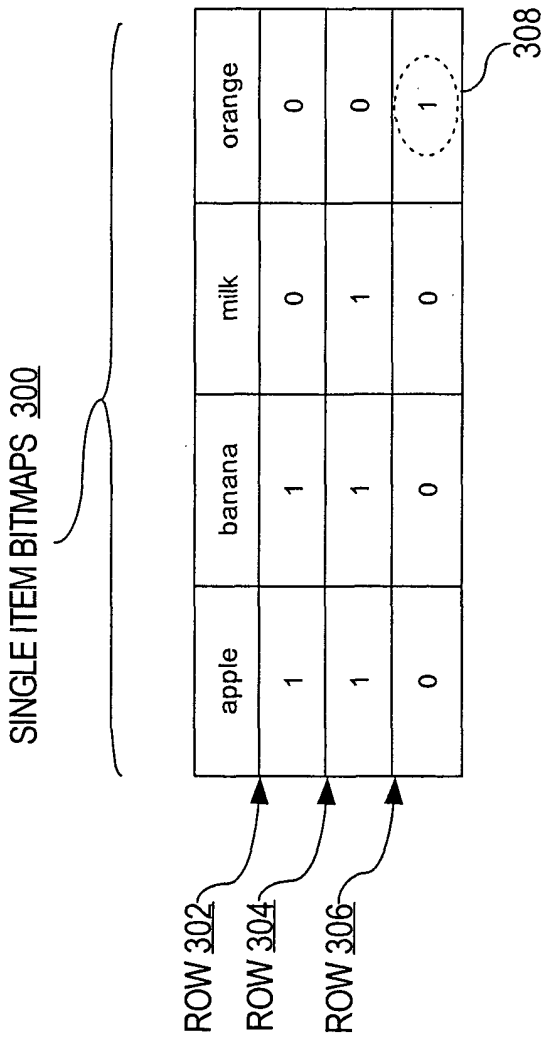
SINGLE ITEM BITMAPS 300
apple
banana
milk
orange
1
1
0
0
1
1
1
0
0
0
0
0
1
308
ROW 302
ROW 304
ROW 306

FIG. 3

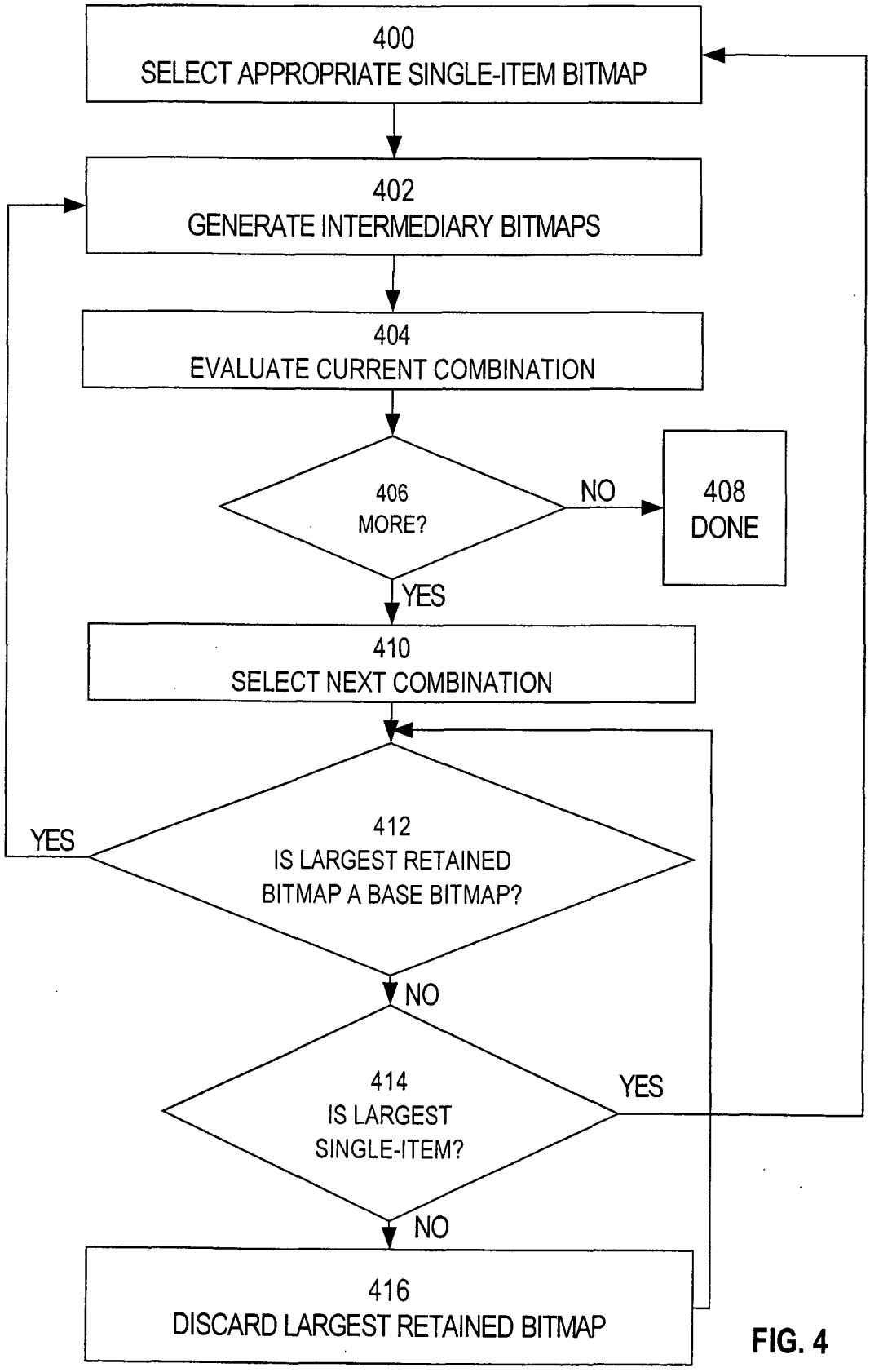
400
SELECT APPROPRIATE SINGLE-ITEM BITMAP
402
GENERATE INTERMEDIARY BITMAPS
404
EVALUATE CURRENT COMBINATION
406
MORE?
NO
408
DONE
YES
410
SELECT NEXT COMBINATION
412
IS LARGEST RETAINED
BITMAP A BASE BITMAP?
YES
NO
414
IS LARGEST
SINGLE-ITEM?
YES
NO
416
DISCARD LARGEST RETAINED BITMAP

FIG. 4

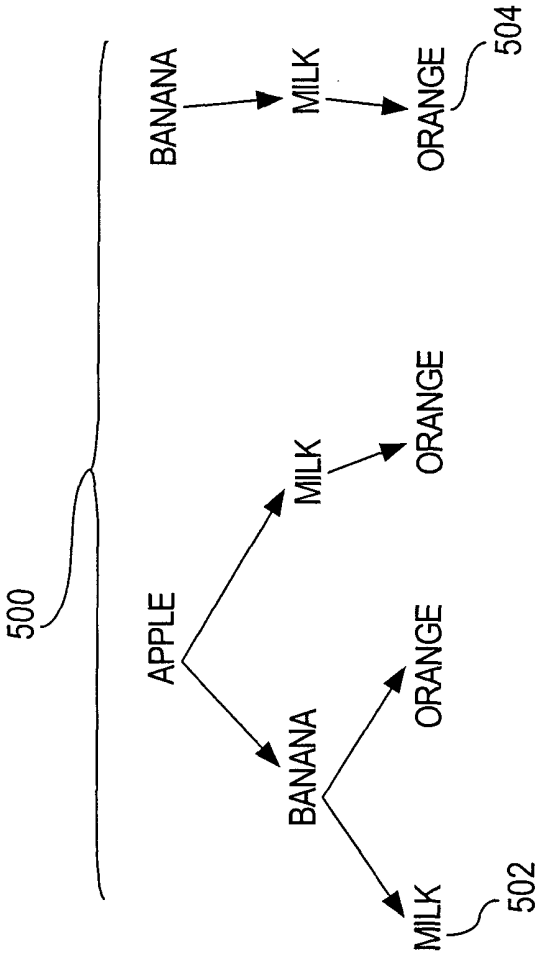
500
APPLE
BANANA
MILK
ORANGE
MILK
BANANA
ORANGE
MILK
ORANGE
502
504

FIG. 5A

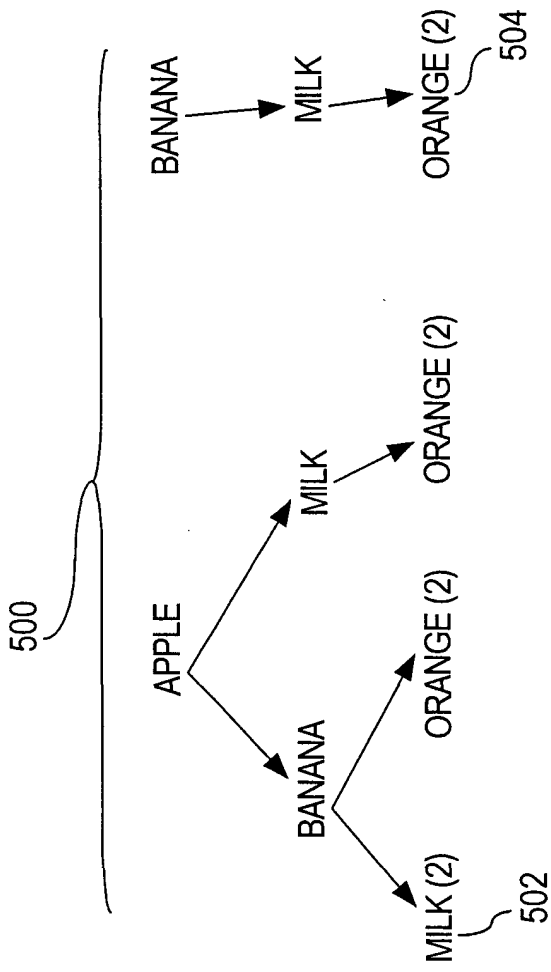
500
APPLE
BANANA
MILK (2)
502
MILK
ORANGE (2)
ORANGE (2)
BANANA
MILK
ORANGE (2)
504

FIG. 5B

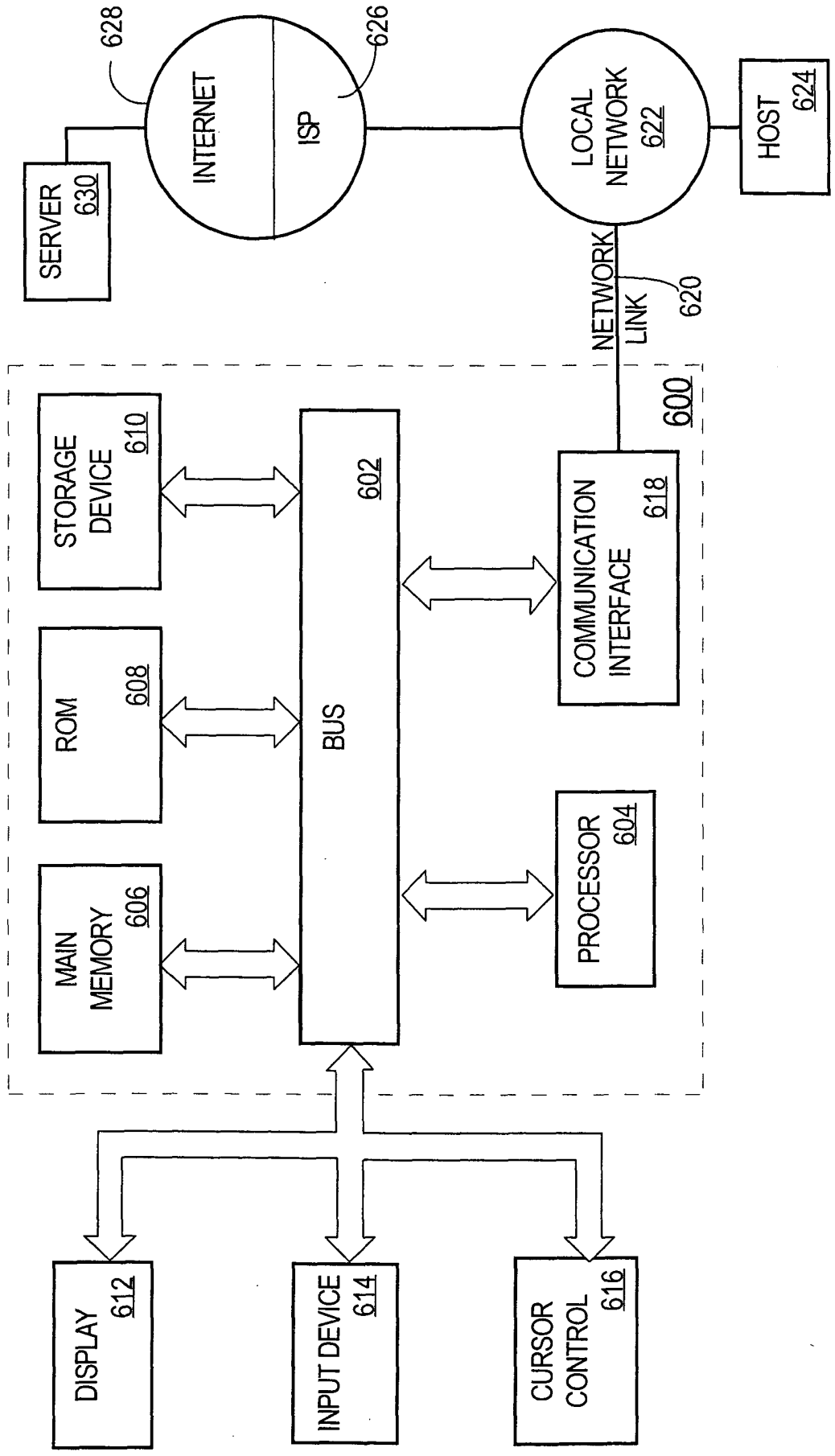
628
INTERNET
ISP
626
LOCAL NETWORK 622
HOST 624
SERVER 630
NETWORK LINK 620
600
STORAGE DEVICE 610
602
COMMUNICATION INTERFACE 618
ROM 608
BUS
MAIN MEMORY 606
PROCESSOR 604
DISPLAY 612
INPUT DEVICE 614
CURSOR CONTROL 616

FIG. 6